

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Harry Hild on May 22, 2009.

The application has been amended as follows:

- 1) Lines 13-15 of Page 1 of the Specification:

Also specifically referenced is commonly assigned U.S. Patent Application Serial No. 10/689,261, now U.S. Patent No. US 7,258,836 B2, filed on even date herewith, entitled "Freeze resistant Buoy System", the entire disclosure of which is incorporated herein by reference.

- 2) Claim 11 (Currently amended)

A device for detecting toxic agents in a liquid medium comprising:

a body comprising at least one portion that is submerged into a liquid medium, an inlet for introducing a sample of the liquid medium to an interior of the body, and an outlet for ejecting the sample of the liquid medium;

a first reservoir within said body comprising a first opening in an upper surface of the first reservoir, a second opening present in a sidewall of the first reservoir, and a first reservoir drain present in a base surface of the first reservoir, wherein the inlet in the body is in fluid communication with the first opening of the first reservoir;

a fluorometer for measuring photosynthetic activity of organisms in the sample of the liquid medium, the fluorometer comprising an inlet in fluid communication with the second opening of the first reservoir and a fluorometer drain;

a pump in fluid communication with the fluorometer drain, the first reservoir drain, and the outlet of the body;

a valve system configured to open and close the fluorometer drain and the first reservoir drain; and

~~an electronics package configured to be in communication with the valve system, the pump and the fluorometer, such that when the sample of the liquid medium is being drawn into the first reservoir the valve system closes the fluorometer drain and opens the first reservoir drain, and when the sample of the liquid medium is being drawn into the fluorometer for the measuring of the photosynthetic activity of organisms the valve system closes the first reservoir drain and opens the fluorometer drain, and when the sample of the liquid medium is being expelled through the outlet of the body, the valve system closes the fluorometer drain and opens the first reservoir drain so that less than 10% of a subsequent sample is mixed with the sample of the liquid medium.~~

an electronics package in communication with the valve system, the pump and the fluorometer, wherein during a first time period the electronics package is configured to activate the pump, close the fluorometer and open the reservoir drain to draw the sample of liquid medium into the reservoir, and during a second time period the electronics package is configured to open the drain from the fluorometer and close the reservoir drain to draw the sample of the liquid medium into the fluorometer for the

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measuring of the photosynthetic activity of photosynthetic organisms in the sample of the liquid medium, and during a third time period the electronics package is configured to close the drain from the fluorometer and open the drain from the sample reservoir to expel the sample of the liquid medium through the outlet of the body so that less than 10% of a subsequent sample is mixed with the sample of the liquid medium.

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance:

Greenbaum et al. (US 2002/0102629 A1) disclose a device for detecting the photosynthetic activity of organisms as well as the presence of toxins in water samples. The device comprises an inlet for continuously introducing a sample of water into a cell, an outlet for discharging the sample, and a fluorimeter situated in the cell (see Fig. 4). The device further comprises an electronics package that analyzes data from the fluorimeter and wirelessly transmits the results. However, neither Greenbaum et al. nor prior art disclose an electronics package configured to control valves such that less than 10% of a subsequent sample is mixed with the sample present in the cell. The electronics package of the claimed invention is patentably significant because the ratio of the new sample and the old sample enables the photosynthetic organisms in the water sample to dark adapt prior to analysis while maintaining efficiency.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL S. HYUN whose telephone number is (571)272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul S Hyun/  
Examiner, Art Unit 1797

/Jill Warden/  
Supervisory Patent Examiner, Art Unit 1797